Gentiana glauca Pallas

glaucous gentian Gentianaceae (Gentian Family)

Status: State Sensitive **Rank:** G4G5S2S3

General Description: Adapted from Hitchcock et al. (1959) and Douglas et. al (1999): Gentiana glauca is a glabrous perennial herb, 1½ to 6 in. (4-15 cm) tall, with erect, solitary, glabrous stems arising from creeping rootstocks. The fleshy basal rosette leaves are elliptic to oval, and ½ to 1 in. (1-2 cm) long, while the two to four pairs of stem leaves are opposite and smaller, ¼ to ½ in. (5-10 mm) long, and eggshaped to more elongate. The terminal inflorescence is a flat-topped cluster of short-stalked flowers. The corollas are deep blue, greenishblue, or rarely yellowish-white, 1/4 to 1/2 in. (1-2 cm) long, and tubular. The five lobes of the corolla are widely triangular, ³/₄ to 1 in. (2-2.5 mm) long, with small pleats in the spaces between the lobes. The subtending bracts are similar to the stem leaves or sometimes broader. The calyx is ¼ in. (5-7 mm) long, usually bluish tinged, inconspicuously keeled and about ½ the length of the corolla. The stamens are shorter than the corolla tubes and the anthers are up to 1/16 in. (1.5 mm) long. The fruits are broadly lanceolate, 1-chambered capsules. The flattened seeds are pale tan, honeycomb-pitted, irregularly wrinkled, wing margined and up to $\frac{1}{2}$ in. (0.7-10 mm) long.

Identification Tips: Gentiana glauca can be identified by the combination of its perennial, rhizomatous habit, its relatively small flowers that are $\frac{1}{2}$ inch (1-2 cm) long, and its cluster of short-stalked, usually deep blue flowers.

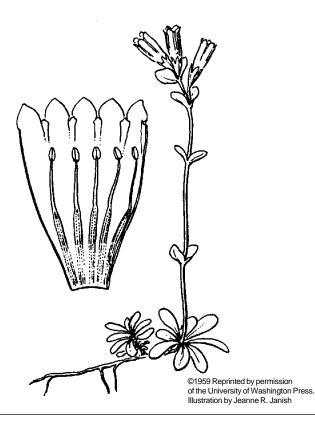
Phenology: This species flowers from July to September.

Range: This species occurs in Alaska and Yukon south to British Columbia and in the Rocky Mountains to Montana. In Washington it is restricted to Whatcom and Okanogan counties.

Habitat: This species grows on hummocks, in seepage areas and moist alpine and subalpine meadows from 4000 to 7000 feet (1219-2133 meters) in elevation. It has been recorded growing with timber oatgrass (*Danthonia intermedia*), Drummond's cinquefoil (*Potentilla drummondii*), yarrow (*Achillea millefolium*), chickweed (*Cerastium* spp.), and spearleaf stonecrop (*Sedum lanceolatum*).

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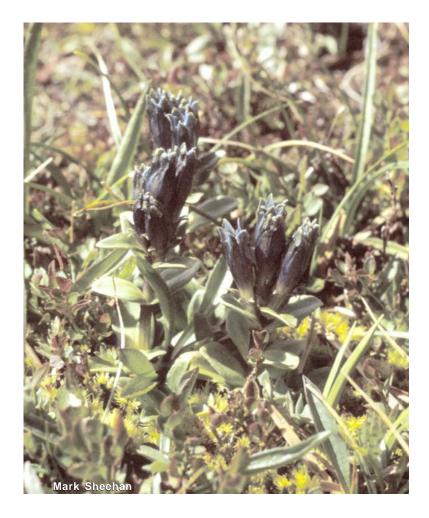
Known distribution of *Gentiana glauca* in Washington



- Current (1980+)
- O Historic (older than 1980)

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Ecology: At one site, *Gentiana glauca* grows in the same hummocky areas as *Gentianella tenella*, but the two species have been found in slightly different micro-habitats. *G. glauca* grows directly on hummocks, while *Gentianella tenella* never grows directly on hummocks. *G. glauca* grows on microsites that are very moist.

State Status Comments: There are fewer than fourteen known occurrences in Washington.

Inventory Needs: Known occurrences need to be revisited and their status assessed, as some records are more than 35 years old.

Threats and Management Concerns: Some populations are decreasing, due to trampling by hikers and trail maintenance, as well as trampling and grazing by horses, cows and sheep.

References:

Adams, A.B., B. Crooks, and P. Williston. Distributions of interesting vascular plants in the Pasayten Wilderness. Washington, with emphasis on *Gentiana glauca* and *G. tenella* in Horseshoe Basin. Unpublished. On file with WNHP.

Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 1999. Illustrated Flora of British Columbia vol. 3: Dicotyledons (Diapensiaceae Through Onagraceae). Ministry of Environment, Lands and Parks, Victoria, British Columbia. 423 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1959. Vascular Plants of the Pacific Northwest Part 4: Ericaceae Through Campanulaceae. University of Washington Press, Seattle, WA. 510 pp.